

ART. 12. AFRICAN PLATYSTOMATIDAE AND PYRGOTIDAE (DIPTERA), IN THE CARNEGIE MUSEUM COLLECTIONS

By GEORGE C. STEYSKAL

Entomology Research Division, Agricultural Research Service,
United States Department of Agriculture, Washington, D.C.

Ninety-four specimens of Platystomatidae, mostly collected in the Cameroons from 1911 to 1935 by A. I. Good, as well as one Pyrgotid, are here reported upon. Several interesting species are included, two Platystomatidae (*Federleyella paucifenestrata* and *Plagiostenopterina goodi*) and the Pyrgotid (*Diasteneura similis*) being described as new species. Little work has been done on the African species of these groups since the great pioneer work of Hendel in 1914 and many of the present records are preceded only by the types. This is a part of a project to revise the Platystomatidae of non-palaearctic Africa.

Family PLATYSTOMATIDAE Subfamily PLASTOTEPHRITINAE

Conopariella acutigena Enderlein, 1922, Stettiner Entomologische Zeitung, v. 83, p. 12. 1, Lolodorf, Cameroons, Nov. 20, 1914 (A. I. Good). Previously known only from the types from Spanish Guinea and "Neu-Kamerun."

C. pallidipes (Enderlein, 1922, Stettiner Entomologische Zeitung, v. 83, p. 15 (*Anaphalantias*); Frey, 1932, Annals and magazine of natural history, (ser. 10), v. 9, p. 261. 1, Lolodorf, Cameroons, Dec. 10, 1914 (A. I. Good). Previously known only from the type from Spanish Guinea.

C. picipennis (Enderlein, 1922, Stettiner Entomologische Zeitung, v. 83, p. 14 (*Anaphalantias*); Frey, 1932, Annals and magazine of natural history, (ser. 10), v. 9, p. 261. 1, Efulen, Cameroons, May 5, 1917 (H. L. Weber); 1 each, Lolodorf, Cameroons, March 6, 1911, Nov. 7, 1914 (A. I. Good). Previously known only from the type series from Cameroons and Spanish Guinea.

Federleyella paucifenestrata, sp. nov. (Fig. 3). 1, Lolodorf, Cameroons, Dec. 10, 1914 (A. I. Good), *holotype*.

Male. Length of wing, 4.3 mm. Head with lower occiput and genae considerably widened, 1.8 mm. wide at lower edge. Color largely yellow, upper half of anterior aspect of expanded genae and ocellar triangle black. Thorax black above, yellow below; most of mesopleura and pteropleura dark brown; humeri yellow. Legs yellow, apical one-fourth of middle and hind femora and all tibiae black. Wings as in Fig. 3, dark brown with hyaline spots, none of which are distad of *ta*. Squamae and their cilia blackish. Halteres yellow. Abdomen yellow below and basidorsally, apex of second segment and remainder of dorsum black, with rather long black hairs.

This species may be separated from the only other known species of *Federleyella* as follows:

- 1 (2). Wing with two hyaline spots closely distad of *ta*; fore tibiae yellow; male head not broadened below.... *F. septemfenestrata* (Enderlein)
- 2 (1). Wing wholly dark brown distad of *ta*; fore tibiae black; male head broadened below..... *F. paucifenestrata*, sp. nov.

Both species have the fourth wing vein from *ta* to a little beyond *tp* with longish setae on the under side.

F. septemfenestrata (Enderlein), 1922, Stettiner Entomologische Zeitung, v. 83, p. 15 (*Anaphalantias*); Frey, 1932, Annals and magazine of natural history, (ser. 10), v. 9, p. 263. Lolodorf, Cameroons, 1 each, July 8, 1920, July 16, 1924 (A. I. Good). The specimens are topotypical—the only other record is of the unique type, also from Lolodorf.

Oeciotypa parallelomma Hendel, 1914, Abhandlungen der Zoologisch-Botanischen Gesellschaft in Wien, v. 8, p. 281; Speiser, 1919, Deutsche Entomologische Zeitschrift, 1915, p. 99. Lolodorf, Cameroons, 1 each, March 8, 1911, Feb. 28, 1921 (A. I. Good). The type was from Ashanti (Ghana) and Speiser recorded the species from the Cameroons.

Onceroparia strigata Enderlein, 1924, Mitteilungen aus dem Zoologischen Museum in Berlin, v. 11, p. 100. Batanga, Cameroons, 1 each, Aug. 30 and Nov. 13, 1911; 1, Metet, Cameroons, Nov. 16, 1918 (all A. I. Good). Previously known only from the type series from Spanish Guinea and Cameroons.

Subfamily PLATYSTOMATINAE

Bromophila caffra Macquart, 1846, Diptères exotiques, suppl. 1, p. 217. 1, Mt. Selinda, S. Rhodesia. Widespread in eastern and southern Africa.

Clitodoca fenestralis Macquart, 1843, Diptères exotiques, v. 2, pt. 3, p. 204. 16, Cameroons (Batanga; Ebolowa; Efufup; Efulen; Lolodorf, Metet); Gabon (Kangwé, Ogové R.). Known from several localities along the coast of the Gulf of Guinea.

Coelocephala stigma Hendel, 1914, Abhandlungen der Zoologisch-Botanischen Gesellschaft in Wien, v. 8, p. 273; Enderlein, 1924, Mitteilungen aus dem Zoologischen Museum in Berlin, v. 11, p. 129. 1, Freetown, Sierra Leone. Known from Uganda, Nyasaland, Cameroons, N. Nigeria, and Togo. The present record is therefore a western extension.

Elassogaster inflexus (Fabricius), 1805, Systema Antliatorum, p. 273 (*Dacus*). 1, Freetown, Sierra Leone. Known from several localities along the Guinea coast.

E. niger (Van der Wulp), 1884, Comptes Rendus de la Société Entomologique de Belgique, v. 28, p. 295 (*Epicausta*); *E. vanderwulpi* Hendel, 1914, Abhandlungen der Zoologisch-Botanischen Gesellschaft in Wien, v. 2, p. 83, *new synonym*. 3, Cameroons (Lolodorf; Batanga). Widespread from the Guinea coast to Aden and South Africa. Hendel's species is no more than a phenotypical variety.

Engistoneura obscura Hendel, 1914, Abhandlungen der Zoologisch-Botanischen Gesellschaft in Wien, v. 8, p. 365; Enderlein, 1924, Mitteilungen aus dem Zoologischen Museum in Berlin, v. 11, p. 139. 3, Dakar, Senegal; 1, Metet, Cameroons. The types were from Kribi, Cameroons, and Buea, Nigeria. Enderlein recorded the species from Spanish Guinea and named several varieties from the same area.

Euthyplatystoma seriatoapunctatum (Enderlein), 1924, Mitteilungen aus dem Zoologischen Museum in Berlin, v. 11, p. 135, *new combination* from *Lulodes*; *E. nitidum* Frey, and var. *tibiale* Frey, 1932, Annals and magazine of natural history, (ser. 10), v. 9, p. 253, *new synonym*. 1, Lolodorf, Cameroons, Jan. 23, 1925 (A. I. Good). I have examined male post-abdomens of several specimens of an extensive series from the Congo. The examination revealed that Frey's variety is no more than phenotypical and adduced the synonymy. The type

of *Lulodes seriatopunctata* was from the Gold Coast, that of *Euthyplatystoma nitidum* from Uganda, and that of var. *tibiale* from the Gold Coast.

Lophoplatystoma hirsutum Hendel, 1914, Abhandlungen der Zoologisch-Botanischen Gesellschaft in Wien, v. 8, p. 396. 1, Lolodorf, Cameroons, Jan. 29, 1916 (A. I. Good). Previously known only from the type from "Kamerun."

L. leucolena Speiser, 1914, Deutsche entomologische Zeitschrift, 1914, p. 13. 2, Metet, Cameroons, Nov. 16 and Dec. 14, 1918 (A. I. Good). Known from the Cameroons, Nigeria and Spanish Guinea.

Lule stellata Enderlein, 1924, Mitteilungen aus dem Zoologischen Museum in Berlin, v. 11, p. 99. 4, Cameroons (Batanga; Lolodorf). The type series was from Cameroons, Togo, and Spanish Guinea.

Naupoda camerunensis Enderlein, 1924, Mitteilungen aus dem Zoologischen Museum in Berlin, v. 11, p. 31. 1, Lolodorf, Cameroons. Previously known only from the type series, also from the Cameroons (Lolodorf and Johann Albrechtshöhe).

N. puella Hendel, 1914, Abhandlungen der Zoologisch-Botanischen Gesellschaft in Wien, v. 8, p. 301. 1, Metet, Cameroons, March 15, 1919 (A. I. Good). Previously known only from the holotype from Obuasi, Ashanti.

Paryphodes tigrinus (Enderlein), 1912, Zoologische Jahrbücher, Abteilung für Systematik, Geographie und Biologie der Tiere, v. 33, p. 374 (*Simomesia*); Speiser, 1913, Deutsche entomologische Zeitschrift, 1913, p. 144; Hendel, 1914, Abhandlungen der Zoologisch-Botanischen Gesellschaft in Wien, v. 8, p. 256; Bezzi, 1914, Bollettino del Laboratorio di Zoologia Generale e Agraria, Portici, v. 8, p. 298; Enderlein, 1924, Mitteilungen aus dem Zoologischen Museum in Berlin, v. 11, p. 122. 2, Lagos, Nigeria; 1, Batanga, Cameroons. Known previously from several localities along the Guinea coast.

Peltacanthina cervina Hendel, 1914, Abhandlungen der Zoologisch-Botanischen Gesellschaft in Wien, v. 8, p. 380. 14, Cameroons (Batanga; Metet). The specimens are evenly divided between forms with dark brown to blackish thoracic dorsum, as in Hendel's description, and those with entirely yellowish thorax, but they are otherwise identical. Hendel's type series was from the Cameroons and Natal.

P. lurida Enderlein, 1924, Mitteilungen aus dem Zoologischen Museum in Berlin, v. 11, p. 149. 1, Metet, Cameroons, Nov. 16, 1918; 1 each, Lolodorf, Cameroons, March 4, 1911, and Jan. 23, 1925 (all A. I. Good). Enderlein's description is scanty, but the form is quite distinct and I have no hesitation in referring these specimens to *P. lurida*. The types were from Spanish Guinea.

P. octodecim (Speiser) 1911, Nassauischer Verein für Naturkunde, Wiesbaden, Jahrbuch, v. 64, p. 254 (*Engistoneura*); Hendel, 1914, Abhandlungen der Zoologisch-Botanischen Gesellschaft in Wien, v. 8, p. 390; Enderlein, 1924, Mitteilungen aus dem Zoologischen Museum in Berlin, v. 11, p. 147. 1, Lolodorf, Cameroons. Known from West Africa and the Cameroons.

Plagiostenopterina goodi, sp. nov. (Fig. 1, 2). 1, Lolodorf, Cameroons, Sept. 24, 1913 (A. I. Good), *holotype*.

Male. Length of wing, 4.9 mm. Color dark metallic greenish black, except brown first two and basal part of third antennal segments, fore femora and apical half of fore coxae. Halteres pale yellow; squamae yellowish with yellowish cilia, blackish at fold.

Head with front parallel-sided, 0.33 of head-width, subshining, including orbits, with sparse and shallow pits anteriorly, and with whitish hairs except on roundish spot in central one-third, which is dull black with black hairs. Cheeks and parafacials very narrow. Palpi black, a little brownish at tip, with black bristles. Arista without palette, practically bare. Chaetotaxy: 1 cruciate *uti*, 1 *vte*, 1 *occ* above middle of head, 2 *genal* (1 a little posterior to lower edge of eye and 1 midway between the first and the neck, near oral margin).

Thorax with dorsum and mesopleura strongly roughened, with white pile except on mid-dorsum and on pteropleura, the longish hairs of which are all black. A pair of weakly pruinose gray lines extends down the middle of the thorax and some grayish pruinosity lies near lateral margins. Prosternum broad, with rather short and numerous pale hairs. Scutellum with moderately long black hairs dorsally. Chaetotaxy: 1 *h*, 2 *ntpl*, 1 *sa*, 2 *pa*, 1 *dc*, 2 *sc*, 1 *mspl*.

Middle femora strongly constricted dorsoventrally in apical fourth above; fore femora without strong hairs, bristles, or papillae below; hind basitarsi wholly covered with whitish hairs.

Wings as in Fig. 1, hyaline with brown costal margin from end of *Sc* to tip of third vein; first basal cell yellow, becoming brown at *ta*; base of first posterior cell brown obliquely from *ta* to *tp*; a large light brown area in apical half of discal and third posterior cells.

Abdomen shining, slightly roughened, with decumbent white hairs over most of surface, some erect white ones basally and some erect black ones near segmental margins. Andrium as in Fig. 3, aedeagus with apical pair of processes only slightly longer than the sausage-shaped glans.

The nearest relative to *P. goodi* is apparently *P. submetallica* Loew, which also has yellow halteres, but differs most obviously in having a spindle-shaped arisal palette (in male); only small brown central wing spot about *tp*; front reddish brown without dull black spot, but with narrow white-pruinose orbits; and hind basitarsi with black hair anterodorsally.

P. submetallica (Loew), 1852, K. Preussische Akademie der Wissenschaften, Berlin, Sitzungsberichte, 1852, p. 600 (*Stenopterina*); Hendel, 1914, Abhandlungen der Zoologisch-Botanischen Gesellschaft in Wien, v. 8, p. 58; Enderlein, 1924, Mitteilungen aus dem Zoologischen Museum in Berlin, v. 11, p. 106; Malloch, 1931, Proceedings of the United States National Museum, v. 78, art. 15, p. 16. 2, Cameroons (Batanga; Lolodorf). Known from many localities in central and southern Africa.

P. vicaria Hendel, 1914, Abhandlungen der Zoologisch-Botanischen Gesellschaft in Wien, v. 8, p. 409. 1, Batanga, Cameroons, Aug. 7, 1913; 1 each, Lolodorf, Cameroons, Nov. 17, 1913, May 14 and 15, 1914 (all A. I. Good). Previously known only from the holotype from Uganda.

Pseudoscholastes marshalli Frey, 1932, Annals and magazine of natural history, (ser. 10), v. 9, p. 251. 1, Fulasi, Cameroons, Dec., 1913; 1 each, Lolodorf, Cameroons, Nov. 17, 1913, Nov. 16, 1914, Nov. 13, 1920 (all A. I. Good). Previously known only from the holotype from Sierra Leone.

Rivellia neotera Speiser, 1915, Deutsche entomologische Zeitschrift, 1915, p. 98. 1, Batanga, Cameroons, Feb. 20, 1911 (A. I. Good). Previously known only from the types from Duala, Cameroons.

R. parallela Hendel, 1914, Abhandlungen der Zoologisch-Botanischen Gesellschaft in Wien, v. 8, p. 169. 4, Batanga, Cameroons (A. I. Good); 5, Lagos, Nigeria. Previously known only from the holotype from Viktoria, Cameroons.

R. rectangula Hendel, 1914, Abhandlungen der Zoologisch-Botanischen Gesellschaft in Wien, v. 8, p. 168. 2, Freetown, Sierra Leone, July 10, 1936. Previously known only from the holotype from Forcados, Nigeria.

Family PYRGOTIDAE

Diasteneura similis, sp. nov. 1, "Congo," (C. B. Antispel), *holotype*.

Male. Length of wing, 6 mm. Very much like *D. variceps* Curran, differing as follows: Cheeks 0.55 as wide as eye-height; antennae yellow, third segment brown apically, back of head with inverted T-shaped yellow mark above neck; scutellum wholly yellow; tarsi wholly yellowish; wings hyaline in basal two-thirds, dark brown in apical one-third, in fork of radial sector, in marginal cell from fork of radial sector to end of pterostigma, and in pterostigma and costal cell; discal cell and first basal cell wholly hyaline.

The known species of *Diasteneura* Hendel may be separated as follows:

- 1 (2). Broad hyaline mark on wing extending forward from apical one-third of discal cell not surpassing fourth vein; all abdominal tergites partly or wholly reddish; cheeks nearly as wide as eye-height (male, South Africa; 1908, Wiener entomologische Zeitung, v. 27, p. 150; type of genus).....*D. laticeps* Hendel.
- 2 (1). Hyaline band extending to costa, base of wing largely hyaline; first to fourth abdominal tergites wholly black; cheeks not more than 0.75 as wide as eye-height.
- 3 (4). Cheeks 0.75 as wide as eye-height; first and second antennal segments black; discal cell partly brown basally; scutellum black laterally (female, Stanleyville, Congo; 1928, Bulletin of the American Museum of Natural History, v. 57, p. 343).....*D. variceps* Curran.
- 4 (3). Cheeks a little over half as wide as eye-height; first and second antennal segments yellow; discal cell wholly hyaline; scutellum wholly yellow*D. similis*, sp. nov.

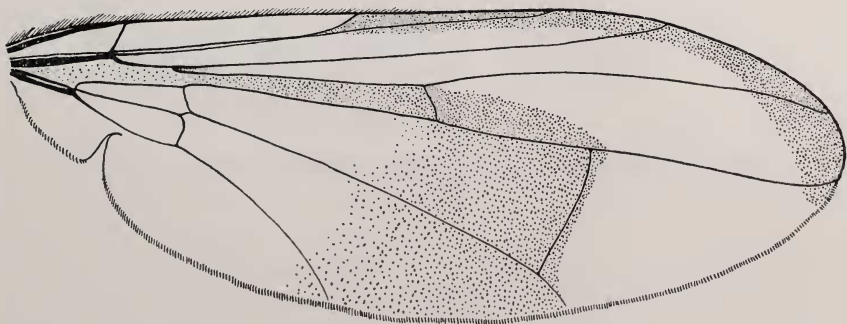


Fig. 1. *Plagiostenopternia goodi*, sp. nov., wing of holotype

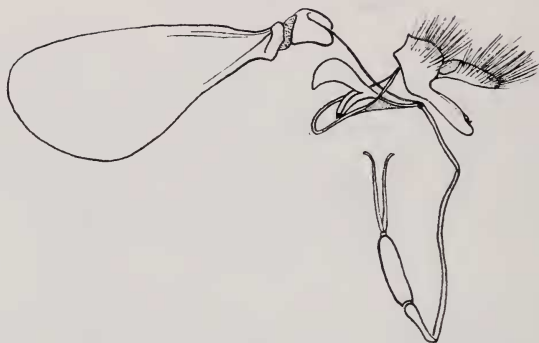


Fig. 2. *Plagiostenoptera goodi*, andrium in lateral view



Fig. 3. *Federleyella paucifenstrata*, sp. nov., wing of holotype